

**CLAIMS:**

- 1     1.     A blank for forming a building element, the  
2     blank comprising:  
3         an elongate body portion (10) having first and  
4     second ends and a plurality of transverse fold lines  
5     (22) which divide the body portion (10) into a  
6     plurality of panels (14,16,18,20), the panels  
7     (14,16,18,20) each having first and second  
8     longitudinal edges;  
9         one or more first tab members (44) extending  
10    from the first end of the body portion (10); and  
11         one or more first apertures (42) adjacent the  
12    second end of the body portion (10);  
13         wherein each of said plurality of panels  
14    (14,16,18,20) has at least one second tab (34)  
15    extending from said first longitudinal edge and a  
16    side flange portion (24) adjacent said second  
17    longitudinal edge, and wherein each side flange  
18    portion (24) is provided with at least one second  
19    aperture (32).  
20
- 21    2.     The blank of Claim 1, wherein each side flange  
22    portion (24) is divided from its respective panel  
23    (14,16,18,20) by a longitudinally extending fold  
24    line (23) which extends along the length of the body  
25    portion (10), and wherein the side flange portions  
26    (23) are adapted to be folded substantially  
27    perpendicular to their respective panels  
28    (14,16,18,20).  
29

1     3.     The blank of either preceding claim, wherein  
2     the body portion (10) has an end flange portion (38)  
3     adjacent the second end thereof, the at least one  
4     first aperture (42) being formed in the end flange  
5     portion (38).

6  
7     4.     The blank of any preceding claim, wherein the  
8     end flange portion (38) is divided from the body  
9     portion by one of the plurality of transverse fold  
10    lines (40), and wherein the end flange portion (38)  
11    is adapted to be folded substantially perpendicular  
12    to the body portion (10).

13  
14    5.     The blank of any preceding claim, wherein one  
15    or more of the panels (14,16,18,20) includes a  
16    strengthening formation thereon.

17  
18    6.     The blank of any preceding claim, wherein one  
19    or more of the panels (14,16,18,20) is provided with  
20    a third aperture adapted to receive a reinforcing  
21    means.

22  
23    7.     The blank of any preceding claim, wherein the  
24    building element is a building block (12).

25  
26    8.     The blank of any preceding claim, the blank  
27    being formed from sheet metal.

28  
29    9.     The blank of any of Claims 1 to 7, the blank  
30    being formed from sheet plastics.

31

1     10. A building block (12) formed from the blank  
2     according to any of Claims 1 to 9.

3  
4     11. A building element comprising:  
5         a body portion (101,201,401) having first and  
6         second ends and comprising a plurality of integrally  
7         formed panels adapted to define the perimeter of the  
8         building element, wherein each panel has first and  
9         second longitudinal edges;

10         at least one first connecting member  
11         (104,204,304,402) adapted to be attached to the  
12         panels adjacent their first longitudinal edges;

13         at least one second connecting member  
14         (102,202,302,402) adapted to be attached to the  
15         panels adjacent their second longitudinal edges; and

16         a third connecting member (106,206,306,406)  
17         adapted to be attached to the body portion  
18         (101,201,401) adjacent the first end thereof;

19         wherein the first and second connecting members  
20         are provided with first and second attachment means,  
21         respectively, each of the attachment means being  
22         adapted to attach the building element to an  
23         adjacent building element, and wherein the third  
24         connecting member (106,206,306,406) is adapted so as  
25         to engage the second end of the body portion  
26         (101,201,401).

27  
28     12. The building element of Claim 11, further  
29     comprising a fourth connecting member  
30     (108,208,308,408) adapted to be attached to the body  
31     portion (101,201,401) adjacent the second end

1     thereof, wherein the third and fourth connecting  
2     members are adapted so as to be mutually engagable.

3  
4     13. The building element of Claim 12, wherein the  
5     third and fourth connecting members are each  
6     provided with a resilient engagement member adapted  
7     to engage with one another.

8  
9     14. The building element of Claim 12, wherein the  
10    third connecting member (106) includes one or more  
11    apertures (142) therein, and the fourth connecting  
12    member (108) includes one or more tabs (144)  
13    projecting therefrom for engagement with the  
14    apertures (142) in the third connecting member  
15    (106).

16  
17    15. The building element of any of Claims 11 to 14,  
18    wherein the first and second connecting members are  
19    each formed from a single piece of material and each  
20    is adapted to follow the perimeter of the building  
21    element.

22  
23    16. The building element of any of Claims 11 to 14,  
24    wherein the building element comprises a plurality  
25    of first and second connecting members attached to  
26    each longitudinal edge of each panel.

27  
28    17. The building element of any of Claims 11 to 16,  
29    wherein each of the connecting members is attached  
30    to the body portion (101,201,401) using an  
31    attachment method selected from the group comprising  
32    riveting, gluing and crimping.

1  
2 18. The building element of any of Claims 11 to 16,  
3 wherein each of the connecting members (402) is  
4 provided with a plurality of engagement teeth (422)  
5 and each panel (420) includes a plurality of cells  
6 (403), the teeth (422) being adapted to be inserted  
7 in the cells (403).  
8

9 19. The building element of Claim 18, wherein each  
10 engagement tooth (422) has a first engagement  
11 portion (422a) projecting in a first direction and a  
12 second engagement portion (422b) projecting in a  
13 second, substantially opposite, direction.  
14

15 20. The building element of any of Claims 11 to 19,  
16 wherein each of the second connecting members  
17 (202,302,402) includes a strengthening rib  
18 (240,340,440) projecting therefrom.  
19

20 21. The building element of any of Claims 11 to 20,  
21 wherein each of the first connecting members (402)  
22 includes a strengthening rib (440) projecting  
23 therefrom.  
24

25 22. The building element of any of Claims 11 to 21,  
26 wherein the first attachment means comprises at  
27 least one tab (134) projecting from the first  
28 connecting member (104), and the second attachment  
29 means comprises at least one aperture (132) adapted  
30 to receive the at least one tab (134) of an adjacent  
31 building element.  
32

1     23. The building element of any of Claims 11 to 21,  
2     wherein the first attachment means comprises a first  
3     fastener element (232) and a detachable fastener  
4     member (234) adapted to attach to the first fastener  
5     element (232), and the second attachment means  
6     comprises a second fastener element (232) adapted to  
7     receive a fastener member (234) of an adjacent  
8     building element.

9  
10    24. The building element of any of Claims 11 to 21,  
11    wherein the first attachment means comprises a  
12    detent (305) projecting from the first connecting  
13    member (304), and the second attachment means  
14    comprises a resilient catch (342) adapted to engage  
15    with the detent (305) of an adjacent building  
16    element.

17  
18    25. The building element of any of Claims 11 to 24,  
19    wherein the body portion (101,201,401) is formed  
20    from a single sheet of extruded cellular plastics  
21    material having a plurality of cells (403) therein.

22  
23    26. The building element of any of Claims 11 to 25,  
24    wherein each connecting member (102,104,106,108) is  
25    formed from sheet metal.

26  
27    27. The building element of any of Claims 11 to 25,  
28    wherein the connecting members are formed from a  
29    plastics material.

30

1     28. The building element of any of Claims 11 to 25,  
2     wherein at least one of the connecting members is  
3     integrally formed with the body portion.

4  
5     29. A blank for forming a building element, the  
6     blank comprising:

7         an elongate body portion (58,88) having first  
8     and second ends and a plurality of first apertures  
9     (76,77,89) formed therein; and

10         first and second side portions (64,66,94,96)  
11     integrally formed with the body portion (58,88),  
12     each side portion (64,66,94,96) being divided from  
13     the body portion (58,88) along a first  
14     longitudinally extending fold line (68,98);

15         wherein each side portion (64,66,94,96) has at  
16     least one second longitudinal fold line  
17     (78,91,93,95,97) which divides the side portion  
18     (64,66,94,96) into at least two sections, and  
19     wherein at least one side portion (64,66,94) has a  
20     plurality of tabs (80,99) extending laterally  
21     therefrom.

22

23     30. The blank of Claim 29, further comprising first  
24     and second end flanges (72,87) adjacent the first  
25     and second ends of the body portion (58,88), each  
26     end flange (72,87) divided from the body portion  
27     (58,88) along a transverse fold line (70,85).

28

29     31. The blank of either Claim 29 or Claim 30,  
30     wherein the plurality of first apertures (76,77) are  
31     formed in two substantially parallel lines extending  
32     longitudinally along the body portion (58).

1

2 32. The blank of any of Claims 29 to 31, wherein  
3 each of the first and second side portions (64,66)  
4 has a plurality of tabs (80) extending laterally  
5 therefrom.

6

7 33. The blank of any of Claims 29 to 32, wherein  
8 the building element is a door lintel.

9

10 34. The blank of either Claim 29 or Claim 30,  
11 wherein the plurality of first apertures (89) are  
12 formed substantially in a single line extending  
13 longitudinally along the body portion (88).

14

15 35. The blank of Claim 32, wherein the building  
16 element is a window sill.

17

18 36. The blank of any of Claims 29 to 35, wherein  
19 the blank (58,84) is formed from sheet metal.

20

21 37. The blank of any of Claims 29 to 35, wherein  
22 the blank (58,84) is formed from a plastics  
23 material.